
CHAPTER – VII

SUMMARY AND CONCLUSION

The dissertation incorporates the results of an investigation on the fossil plants from the Upper Gondwana beds in Trichanapalli District, Tamil Nadu. The Sivaganga formation representing Cauvery basin in Tamil Nadu includes several plant fossil localities. Trichanapalli district is one of the region from this area having promising fossiliferous localities. The area is studied by few workers in the past. Hence the present work is undertaken to understand the composition of fossil flora. Its probable age and palaeoenvironment, the plants were found as petrification and Impressions. The petrification were collected from Garudamangalam & Uttatur. The plant impression were collected from Therani & Uttatur. The object of the present investigation and its background is given in Chapter 1 Introduction on PP:1-10.

The Chapter 2 is the previous work which gives an account of the earlier contribution on the upper Gondwana flora by different workers it is given on PP:11-53.

The chapter 3 is material and methods it gives the information about the plant material collected from the localities and methods used for their studies. It is given on PP:54-61.

Chapter 4th is the Geology & Topography of the area. It gives geology & lithological information about the rocks found in the localities their information enables us to understand the fossiliferous beds of the area and the type of fossils found in them. It is given on PP:62-67.

Chapter 5th is Descriptive. It includes two parts. Part-I deals with studies of petrified coniferous woods it consists of 3 genera and 4 species namely.

- 1) Araucarioxylan garudmangalensis Sp.nov.
- 2) Agathoxylen trichanapalliense Sp.nov.
- 3) Podocarpoxylen rajmahalense
- 4) Podocarpoxylen Uttaturense Sp.nov.

out of 4 woods 3 species are new. The third one P. rajmahalense is earlier described by Bose & Maheshwari. It given on PP:68-93.

The Part-II includes 12 impressions, they belongs to Cycadophyta, coniferophyta & unclassified plants. Among the Cycadophytes genus. Ptilophyllum represents 3 species genus Dictyozamites represents 2 species while Pterophyllum, Otozamites & Anomozamites are represented by One species each. Hence Cycadophyta includes 8 plant impressions. The coniferophyta includes 2 genera & 3 species. Representing family Podocarpaceae & Araucareaceae. The genera are Elatocladus & Brachyphyllum. Elatocladus represented by 2 species while Brachyphyllum is represented by only 1 species. The unclassified plants includes a single member Desmiophyllum indicum which show a broad range of affinities. Hence it is included under unclassified plants. It is given on PP:94-111.

Chapter 6th is General consideration which gives considerations arising from the present investigation & are given on PP:112-121.

Chapter 7th is Summary & Conclusion, It gives the brief account of the relevent chapters. It is given on PP: 112-114.

The Next chapter is References which gives the literature cited in the work and given on PP: 115-127.

The dissertation concludes with a note on the authors gratitude and sincerely thanks to B.A. Vagyani for his supervision and help throughout the course of investigation.
